

of ten," the experience of Sir Astley Cooper, as well as of most other surgeons, proves that it is erroneous and without foundation.

M. Vergne publishes the following mode of proceeding in the *Bulletin Therapeutique*:—"The patient being seated on a chair, the surgeon takes the luxated limb and holds it perpendicularly; he applies one hand to the middle of the arm, the other towards the wrist; he next raises his foot and placing it under the luxated head of the bone, he fixes it on the chest and draws the arm slightly towards him, whilst he depresses it in drawing it forwards; he increases the force, at first proceeding quickly." He says he has succeeded where others have failed.

The knee in the axilla acts upon the same principle as the fist, serving as a fulcrum for the arm. Sir Astley Cooper mentions it, and says, that even in persons of powerful muscles, he has known it succeed when the patient remained in a state of intoxication. Mr. Kirby mentions several cases in which he employed it with perfect success, but the method is not considered so good as that of the heel in the axilla. However, I have often succeeded with my knee, without any difficulty.

Let your patient sit on a low chair or stool. If it is the right arm stand behind him, if his left stand before him; raise his arm perpendicularly by the side of his head, and then place the ball of your foot upon the chair or stool, and your knee in the axilla as close as you can against the head of the bone. Now depress the arm forcibly and bring the elbow down towards the patient's side, at the same time raising your heel and pressing with your knee upwards and outwards. You will not succeed so well if you do not in the first instance raise the arm perpendicularly, for the reasons which I have given in treating of "White's Method."

#### ON TRAUMATIC TETANUS AND ITS TREATMENT, WITH SOME REMARKS ON THE EXTRACT OF CANNABIS INDICA OF COMMERCE.

By JAMES INGLIS, M.D., Halifax.

(Concluded from page 147.)

In the Journal of March 5th, my remarks bore especially upon traumatic tetanus, but they equally apply to the idiopathic form of the disease. In the one case, the immediate exciting cause is apparent; in the other, it is more obscure. The proximate cause, however, in both is similar, and any plan of treatment which may be found to be successful in traumatic tetanus, will, doubtless, be no less efficacious in idiopathic, inasmuch as the latter is the less fatal form of the disease.

In traumatic tetanus, the first care of every medical man is evidently, at the invasion of the disease, to cut off from the membranes of the brain and spine the exciting or primary irritation, by isolating or removing immediately the injured member. His next care, if he see the case early enough, is to attempt to reduce the secondary, but more serious irritation in the spinal theca, by the usual remedies for the reduction of local inflammatory action, viz., by the application of cold (ice if it can be obtained) to the spine, as Professor

Miller recommends; or, by cupping or leeching, immediately succeeded by counter-irritation of an active character. A more soothing treatment has been recommended in the application of direct sedatives to the spine, as of morphia, belladonna, hyoscyamus, and the like, but any ultimate benefit arising therefrom, seems questionable. The warm bath, the cold bath, and cold affusion, have all in succession had their supporters, and have as often again fallen into disuse.

The internal remedies which have been exhibited in this disease, are, from the very intractability of tetanus, exceedingly numerous; and, in proof of the uncertainty of their action, I may quote, as Dr. Symonds has done, the language of Sir James M'Gregor, who has thus written—"The remedies which have been chiefly trusted to for the cure of this formidable disease, are opium, mercury, wine, warm and cold baths, venesection, ipecacuanha, and digitalis, in large doses, enlargement of the original wound, and amputation of the limb. These have been tried alone, and in various combinations, and I am obliged to confess that the whole failed in almost every acute case of tetanus which occurred. The three first have been administered in unlimited doses without effect; the cold bath is worse than useless."

There are, however, other internal remedies, not enumerated in the above list, which appear to be entitled to our more favourable consideration; of such are, the sulphate of quinine, carbonate of iron, tartrate of antimony, turpentine, assafoetida, and, perhaps, the cannabis indica.

I am induced to place the sulphate of quinine at the head of these remedies, from the decided sedative effects which I have found to arise from its exhibition in large doses, in a class of disease, less intense, it is true, but nearly allied to the one under consideration; I mean epilepsy and hysteria. I have seen epilepsy simulate tetanus so closely, that for a time the one was not to be distinguished from the other, except by the temporary nature of the spasmodic contraction of the muscles in the former. But to return to what is of greater import than a mere general statement, as to the sedative effect of large doses of sulphate of quinine, in cases which are not now before us, we have direct testimony as to its decided utility in traumatic tetanus itself. In the *Provincial Medical Journal* for December 30, 1843, we find a very interesting case given, from the practice of Dr. Malone, of Florida, in which blood-letting, purgatives, turpentine, and opium, had been had recourse to, but with so little effect, that upon the third day of the disease we find the report to run as follows:—"The case appears to be hopeless; the pulse ranges from 130 to 140; \* \* \* epigastrium firm and unyielding; \* \* \* frequent spasms extend from the foot to the stomach, and from thence to the throat; pain in the region of the epigastrium upon pressure, and frequent hiccups." It was at this extreme, this "hopeless" period of the disease, that the quinine treatment was commenced; it was administered at first in five-grain doses every two hours, combined with a quarter of a grain of morphia. Symptoms of amendment soon after appeared; the treatment was persevered in, and the patient was dismissed convalescent on the fourteenth day of the disease.

It would extend these remarks to too great a length

were I to notice the various successful cases, in which one or other of the remedies named have been exhibited. Our own Journal contains many of them, and the pages of contemporary periodicals sufficiently bear me out in the observation, that there are other remedies besides those enumerated by Sir James McGregor which appear entitled to our more favourable consideration.

Of the case, which forms the subject matter of these remarks, a very unfavourable opinion was from the first formed. The disease, ere we saw our patient, had made considerable progress; the pulse was ranging from 120 to 130, (a fatal prognostic, according to Dr. Parry,) and the primary irritation had been allowed, unmolested, to exert its influence for full twelve days. Under these circumstances it was considered to be a fair case for the trial of the *cannabis indica*; relieving at the same time the intestinal canal, by turpentine enemata, in combination with the tincture of *assafoetida*.

The treatment commenced with one grain of the extract of gunjah, repeating it at short intervals, and gradually increasing the strength until four grains were given at a dose. Deglutition at length becoming so difficult, recourse was had to gunjah enemata. Thus, in fifty-eight hours, the total amount of the extract exhibited was fifty-four grains; besides the external application of a scruple of the gunjah, to a denuded surface along the spine. The general effects were soothing to the patient, subduing sensibility, whereby suffering was diminished; whilst the cerebral functions were left unimpaired. But the disease, robbed doubtless of some of its terrors, had taken too strong a hold of its victim, and nature at length gave way.

A question may now naturally arise respecting the purity and strength of the extract of gunjah administered to this patient. Of its purity I shall speak hereafter; and, in proof of its activity, I shall merely have to adduce two short cases. The first is that of a lady, aged 32, married; she had been subject for several years to chronic rheumatism; had taken the general list of remedies, without much relief; the pain was most severe during the night. She was ordered a pill, consisting of the fourth of a grain of the extract of gunjah, three grains of extract of *colocynth*, and a little essential oil, to be taken at bed-time. At three o'clock on the following morning I was rung out of bed by this lady's husband, who, in much alarm, told me that he thought his wife was dying. Upon entering her room, I found her complaining of cold and general numbness; there was an inability, or rather a disinclination to move; and, on raising the head, she became giddy and nauseated; pulse, 130; tongue, moist, clean; there was slight thirst. I immediately allayed their fears; told them that after a sleep, accompanied by perspiration, she would awake refreshed and better. Stimulants internally and hot external applications soon rendered her feelings more comfortable, and she fell into a deep calm sleep, during which she perspired profusely, and on awaking, after some hours, all those symptoms, for the time so alarming, had passed off, and with them, I am glad to say, also her pains.

The second case which I shall briefly notice, is that of a young woman, aged 27, unmarried, who had, for a long time, been subject to sudden gastric pain, or,

as she said, cramp of the stomach, after eating. I ordered her pills somewhat similar to the former, containing a fourth of a grain of the extract of gunjah, and to be taken about half an hour before dinner. In the afternoon of the same day, I was suddenly sent for by the lady at whose house this woman was servant; and, on arriving, was informed that the patient had taken the pill as directed; had expressed herself as more comfortable and freer from pain than she had been for years; but, that an hour had scarcely elapsed ere she complained of giddiness, numbness, and a feeling of cold. She then fell from her chair in a fit, and was thence taken to bed, where I found her perfectly conscious, but listless, and disinclined to move; she had all the other symptoms of what might be called, specifically, *cannabism*; for the appearance of a person under the influence of the gunjah, when once seen, cannot be forgotten. The bowels had been inactive, and I ordered immediately an enema, whilst a little castor oil and brandy were given by the mouth. The girl soon fell asleep, perspired freely, and awoke with slight vertigo, of which, however, she was quite relieved by a second sleep. She did not repeat the gunjah, and I need not say, she had no more "fits."

In other cases, as I mentioned, about two years since, in a former communication, where opium had been exhibited for any length of time, and where, from its use, its powers had become deadened, I have found the gunjah in quarter-grain doses, combined with the opium or morphia, to be of essential benefit.

But this remedy, like every other of scarcity, and consequent high price, is subject to abominable adulteration, and it is accordingly most shamefully adulterated. Since I first obtained, through the kindness of Mr. Squire, a portion of the original specimen of the extract, which had been given to him by Dr. O'Shaughnessy, I had entirely given up the use of the gunjah, solely from the uncertain effects resulting from the administration of a spurious drug, manufactured and vended as the genuine extract. It is only within these few months that I have recommenced the use of this medicine, from having found a very pure specimen of the extract in the shop of Mr. Suter, of Halifax, and it has been of this extract that I have hitherto spoken in this paper. I am led, however, from circumstances connected with this particular case of tetanus, to notice another extract, which, from having been sent to Mr. Swallow, from York, as the genuine drug, we had very nearly, in the case mentioned, exhibited.

It is not my intention to enter into a minute chemical analysis of either of these extracts, but I shall state sufficient to show that they differ from each other in many essential properties; and perhaps the observations made may tend to guide others, either in the choice of the pure, or in the rejection of the adulterated drug.

#### ESSENTIAL PROPERTIES.

In Spring Water.

Pure Extract.	Spurious Extract.
Wholly Insoluble	Partially Soluble
Immiscible.	Miscible.

A dirty green sediment separates on standing; supernatant fluid, amber-coloured.

ESSENTIAL PROPERTIES.

*Pure Extract.*

*Spurious Extract.*

In a Solution of Caustic Ammonia.

(Almost) *Insoluble.*

The ammonia acquires a light yellowish green tinge, which, when neutralized with acetic acid, deposits a brownish green precipitate. The extract left is imperceptibly altered in weight, becomes softer, and assumes a paler green colour than before.

(Almost) wholly *Soluble.*

Solution of a dark, dirty brown colour. A small green insoluble residuum is left on the filter, which is the portion of pure extract present in the specimen.

In a Solution of Caustic Potassa.

(Almost) *Insoluble.*

Tinges the liquor potassæ of a light brown amber colour, which, when filtered and neutralized with acetic acid, deposits the colouring matter in light green flakes. The insoluble extract remains unaltered, retaining its fresh, bright green colour.

(Almost) wholly *Soluble.*

Solution of a dark reddish brown colour, a brighter brown than with the ammonia. The potassa brings out a strong decided flavour of green tea, which completely overcomes that of the small quantity of gunjah present.

In Alcohol.

Entirely *Soluble.*

Solution : bright grass green, which deposits, on standing, a precipitate of light green colouring matter. When dropped into water, the tincture deposits its extract, and gives to the water a milky opacity, having also the green tinge of the gunjah. This is again rendered transparent by liquor potassæ, and re-rendered opaque by excess of acetic acid.

Partly *Soluble.*

Solution : dirty green, precipitates on standing, a large granular deposit of brown and green matter. This tincture when dropped into water, gives it a brownish green tint, not milky, which, on addition of liquor potassæ, becomes amber-coloured.

In Dilute Spirit.

*Insoluble.*

(Almost) wholly *Soluble.*

Solution : deep, dirty brown, which deposits a large brownish green sediment. Liquor potassæ added, brings out the strong flavour of tea.

In Strong Acetic Acid.

*Insoluble.*

The extract becomes of a lighter green colour. The acetic acid remains colourless.

(Almost) wholly *Soluble.*

Solution : dirty green; precipitates a green deposit, which seems to be the small portion of gunjah present in the spurious extract.

ESSENTIAL PROPERTIES.

*Pure Extract.*

*Spurious Extract.*

In Wood Naphtha.

Entirely *Soluble.*

Solution : fresh, bright, emerald green. Very little deposition of green colouring matter.

(Almost) wholly *Soluble.*

Solution : olive brown, throwing down, on standing, a mixture of brown and green precipitates.

Other extracts I have examined, and have found them to vary much in their constitution, but none of them to approach to anything like purity. A very small proportion of the genuine extract is sufficient to give to agglomerated masses of extract of hyosyamus, hop, tea, opium, &c., a slight green tinge, and also the peculiar flavour of the gunjah; but a very slight examination may readily detect the fraud; indeed, so easily may this be done, that should there not be opportunity for testing it as above, it is only necessary to place a piece of common glass upon a sheet of white writing paper, drop a minute portion of essential oil upon it, add a grain or two of the suspected extract, and rub together with a clean knife or spatula. With the genuine extract, a smooth, clear, bright green stain is made upon the glass; whereas, with the impure extract, the stain is of a dirty green, or brown colour, generally rough, and interspersed with black or brown specks, according to the extent of adulteration.

As the pure extract is abundantly soluble in the essential oils, these may be made to form elegant vehicles for the exhibition of the gunjah. Solutions are produced of a bright green emerald colour, which, partaking of the soothing sedative properties of the gunjah, do not possess so powerfully its death-like depressing effects, which for the time are so alarming to the patient. These solutions may be made of such strength, that a quarter of a grain of the extract may be exhibited in two drops of oil, which may then be rubbed up with a little sugar, and made into a draught by the addition of hot water. I have frequently, in a similar manner, given internally the gunjah, in combination with cajuput oil, in which it is particularly soluble; and I have found, that with it may be formed a valuable embrocation, in chronic rheumatic affections of the joints.

I am now drawing to a close a paper which has, I feel, already too far exceeded the ordinary bounds, I dare scarcely further trespass; yet I cannot refrain from adding a very few remarks, which appear necessarily to arise out of the foregoing observations. Thus, when we find such differences to exist in the chemical properties of medicines which are vended as genuine, we surely cannot be surprised at the discrepancies which are to be found in the statements of medical men, with respect to the action of the same, or rather, of what ought to be the same, remedies.

Is it not, then, high time that the cupidity of the medicine-vender should be made to give way to the well-being of the community at large? If the already large profits of the druggist are not a sufficient guarantee for the genuineness of the drugs he vends, it is necessary, for the good of our patients, for the character of the profession, and for the furtherance of medical science, that some plan be adopted, whereby, with confidence, the physician may prescribe, knowing well that the prescription ordered, shall be faithfully

prepared. For this purpose, might it not be advisable to suggest to Sir James Graham, the propriety of urging upon the Council of Health the necessity of instituting, or of himself causing to be instituted, certain government district chemical inspectors, who should be entrusted with full power, in their districts, to enter at all times, and to examine in any manner, all drugs and pharmaceutical preparations kept and sold by druggists; and to seize and destroy every spurious drug, or every genuine drug rendered inert by age, or otherwise deteriorated, and every pharmaceutical compound not prepared according to the received and acknowledged formulæ of the recognized Colleges.

A thorough conviction of the importance of some such plan must be my apology for obtruding these observations, and should they be the means of drawing forth, from some one else, a more explicit and better digested scheme whereby these objects may be obtained, my aim in writing will have been fully gained.

#### PROVINCIAL

### Medical & Surgical Journal.

WEDNESDAY, MARCH 26, 1845.

After the satisfactory declaration made by Sir James Graham, in introducing the new medical bill, of his desire to ascertain the opinions of the medical profession, in reference to the provisions of that measure, it is incumbent on all classes of medical practitioners, freely, and at once, to point out both the objections which still remain in force against certain of its clauses, and the defective nature of others, which must interfere with its satisfactory operation. We have before expressed the opinion that the bill might, in itself, with certain alterations, prove advantageous as well to the public as to the profession; and with some emendation in the constitution of the Council of Health, a more effective mode of restraint on illegal practice than the clumsy and inoperative clause of the Apothecaries' Act ever has, or ever could have proved, and the indication of giving to all branches of the profession a fair and equitable participation in rights and privileges, heretofore confined to a selected few, would render it all that could be desired.

Some of these amendments require to be made in the bill itself; but the last-named is so intimately mixed up with the position assigned to the great body of physicians, surgeons, and general practitioners, in the several corporations to which they are or may be attached, as to render it of the first importance, in forming any opinion on the merits of the new medical bill, to take also into consideration the provisions of the charters of incorporation, granted, or to be granted, and the manner in which such provisions have hitherto been, or may hereafter be, carried into effect.

This, then, is a main point, challenging the immediate and most earnest attention of the profession. The general practitioners seem fully alive to the importance of this question, and we trust that they will not relax their efforts until they shall have attained for themselves, either a fitting share—a share to which they are entitled by their numerical, and to the public at large, general importance—in the honours and privileges of the College of Surgeons, to which it is proposed, under the new bill, to attach them; or, failing this, a separate incorporation for themselves, based upon comprehensive and liberal principles.

Were the existing class of general practitioners possessed of one qualification only—the license of the Apothecaries' Company—we should at once prefer the latter mode; but we cannot forget that a large portion of them are already also members of the College of Surgeons—certified surgeons by the diploma of the College—and in the eye of the law equally authorised to practice surgery with the president of the College, the members of its Council, or any others of the body, whatever their designation may be. There is, therefore, no reason why these gentlemen should tamely submit to be unceremoniously, and for ever, excluded from all share in the corporate privileges of their College; and they will be securing for themselves, and for the licentiates in medicine and surgery, with whom they may hereafter be associated, a much more honourable place in public estimation, should they succeed in the attainment of their just and equitable claims upon that body.

But there is another body of the profession also in danger, and whatever may be the position of the general practitioner, or of the member of the College of Surgeons, under the new bill, we cannot but think the position of the physician is equally compromised, unless the intended charter of the College of Physicians should prove very different from what its contemplated provisions are understood to be.

It is with great satisfaction that we behold the members of the College of Surgeons following out the course which we recommended in a recent number. Sir James Graham has invited discussion, and not to make him acquainted with the defects of his measure, and the grievances and injustice under which so large a proportion of those for whom he is legislating are labouring, would be equally uncourteous and impolitic. Let petitions to Parliament be drawn up and presented; they will doubtless work out a measure of good; but by all means memorialize the Right Honourable Baronet himself. A hurried reading of the petition, to which few, if any, amidst the noise and confusion of the House will attend, and its subsequent disposal, on or under the table, will be the fate of most of these documents, and the complaints and suggestions